



Deliverable 4.9 Application Experiments scale up plans – version 2

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Objective of the deliverable

This deliverable looks at the development/commercialisation plan for the Humanizing Technology Experiments, specifically to what has happened after the first version of this report. With that is assess and shows the application of the experiments scale up.

History of changes

Date	Version	Author	Comment
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1. Abstract

This deliverable reports on the development trajectories of the 8 high-potential application outcomes from the Humanizing Technology Experiments (HTEs), building on the exploitation analysis in D5.11. It documents the progress of each initiative from project completion through December 2025, revealing the differential pathways that innovations follow as they move through the development funnel.

The analysis shows the innovation process in action: some prototypes have been actively developed and further validated, while others have pivoted toward different applications, and some have been archived as the landscape or teams' interests shifted. Of 23 distinct development actions tracked for the 8 high-potential applications directions, 4 projects remain in active development but with adjustments, 3 are in passive exploration, and 1 has stopped. This distribution reflects the healthy reality of innovation portfolios, since not all ideas mature at the same pace, and some create value through different pathways than originally anticipated.

Rather than treating this as failure, the report positions these outcomes within a broader systems perspective. Artists retain intellectual property and agency in development decisions. Some projects succeeded by finding unexpected applications (e.g., WTFood becoming Fair Advantage, Council of Foods expanding into Forest governance). Others contributed to the knowledge commons through open-source release, academic publication, or had an influence on other initiatives.

This deliverable demonstrates that art-driven innovation's value extends beyond direct commercialization: it includes ecosystem learning, methodological advances, and influence on how practitioners and policymakers engage with emerging technologies like AI.

2. The HTE Application plans execution

As a result of the Humanizing Technology Experiments, 15 high potential outcomes - including 7 artistic outcomes and 8 application outcomes - had been identified. All these outcomes have been thoroughly analysed and provided with 'impact opportunities' for further development towards the application outcomes, resulting in 23 application plans (see D5.11). In this deliverable, we will report on the progress of each of the plans and the additional results that have been achieved.

HTE 1: Future Protein – Remote Sensing Predictive Model

Future Protein is a project by the artist collective IM-A studio. The collective decided to separate on good terms, but each will take a different personal development path. Although both stay committed to disseminating the outcomes of the Future Protein project, it has no direct focus for further development for them. When opportune, the project is promoted and shared to contribute to the importance of mussel farming and showing the potential of the predictive model based on the mussel value formula.

On that note, the duo presented the project during an artist talk GENS public programme at the Venice Architecture Biennale on October 9th, 2025. They discussed the future of our food system with the audience and showed Mussel ID as a methodology for making our food more transparent and combining all elements of food chain into one digital platform.



Figure 1: Nataly Khadziakova and Katya Bryskina presenting at GENS public programme, Venice Architecture Biennale. [Image source.](#)

The development for Future Protein had two directed actions that were pursued:

1. Development of a reliable prediction model for aquaculture production location assessments, predicting value produced in terms of food, ecosystem benefits and biomaterial.
2. Model expansion to land-based predictions for agricultural SMEs

Related to [1], the reliable prediction model for aquaculture production location assessment (not only for mussels) forms a part of BUoT's involvement in the new Chips JU (EU Chips Joint Undertaking) project proposal, for sea-based wind turbine farms. The future development of the idea will depend on the success of the project.

Related to [2], we offered the prototype as an option to test in the PPE. However, this project was not selected due to the lack of a fit with the selected SMEs in the program.

HTE 2: MVPxFFF – Food Forest Flavors Computer

The MVPxFFF Food Computer (current name) was developed by Genomic Gastronomy, who decided to mostly focus further on the Mock Wild Picnic concept, which was the artistic outcome. It evolved into a sequel of new MockWild interventions, a.o. in [Egypt](#) where they use speculative images, videos, and recipes to imagine, taste & debate hybrid landscapes and cuisines. They continue their artistic research around food forests, including initial set of [Food Forest Taste Tests](#) and additional research into [perennials](#).

The development plan for the food forest flavors computer had three actions :

1. development of real-time data incorporation functionality for food forests
2. user interface design criteria assessment for agricultural SMEs
3. scientific research case study for guided prompting with KU Leuven

Related to [1], the collective pushed an update of the Food Computer (<https://fffxmvp-3jzcu6ra6q-ew.a.run.app/home>) in December 2024, also to enable the SME as part of PPE to test some new recipes. The palette of ingredients and available dates has been increased. However, they did add two additional locations to the database to show to local food forests the possibility and keep on developing this line of blending food forests and regional produce with the near consumers.

However, with the improvement of the generative AI and capabilities of ChatGPT / Open AI o3 and o4, the built prototype became less distinctive, and the collective decided to instead of further developing their prototype, make use of the available open sources. This demonstrates how prototypes can pivot toward more relevant contributions when technological landscapes change.

First, let's select food forest ingredients near you!

Choose where you will get your ingredients from:

- ☒ Baarle-Nassau
- ☒ Voedselbos Amsterdam
- ☒ Food Forest Pantry
- ☒ Eemvallei
- ☒ Thuishaven in Zeewolde

Figure 2: screenshot from [FFFXMVP](#) prototype, which is still available for testing. Accessed 08.12.25

Related to [2], the MVPxFFF had been selected by different SMEs as their top 3. Eventually, Protiberia decided to test the prototype to understand and help them in their mission of adding *Tenebrio Molitor* as an alternative protein source.

Since April 2025, they have been developing a plan focused on using MVPxFFF as a strategy for the insect consumption promotion narrative and protein shift in food transition.

This prototype allowed them to get acquainted with this form of AI-assisted working and to “play” with combinations of ingredients with similar flavour and texture like the ingredients they produce (dehydrated larvae, *Tenebrio* powder and oil) and use the information generated to strategize and think on how Protiberia could develop into human food products and support insect protein consumption. This led to them to focus on the next actions:

1. stimulating the awareness and the cultural behavioural shift of potential consumers.
2. identifying challenges and goals, extracting information from other sources and exchanging insights and perceptions among their team members.

This will make it possible to create a realistic and robust plan for the commercialization of *Tenebrio* products from next year when the market opens for dehydrated larvae commercialization.

This test made them more confident about promoting human consumption of insects on their web page and in their social network. They hope that raising awareness about insect-based food will help us to make people more conscious about the necessity to consume more sustainable products and integrate them in the diet. The first result of the MVPxFFF use is that, in our web, more human food related posts are created because of using this recipe generator, both in Spanish and English. Examples are: <https://protiberia.com/en/a-healthy-and-sustainable-protein-steps-toward-nutritious-future/> and <https://protiberia.com/tenebrio-molitor-superalimento-sostenible-mitos/>

“What we notice with the use of MPFxFFF is that appearance is very important when it comes to consumer acceptance. If even our team members (used to see and touch insects every day) find “not so appealing” the image of insects generated with the recipe in this HTE prototype, it is difficult to imagine consumers are going to accept it so easily. This fact will help us design our products in the future.”

Related to [3] on the scientific research case study for guided prompting with KU Leuven, current research projects focus on augmenting dashboards with a conversational agent. This shift is critical for the further uptake of such tools by SMEs, as it moves the interaction beyond simple 'black box' generation toward a model of active human-AI collaboration. Guided prompting interfaces are designed to act as an 'intellectual sparring partner,' allowing domain experts to refine and challenge AI

outputs through dialogue rather than passively accepting them. Furthermore, by integrating '**Enriched Conversational XAI**' methods, systems can provide the explanatory depth users require to trust the AI's reasoning. This addresses a key barrier to adoption: ensuring that complex generative models remain transparent, controllable, and aligned with the specific professional constraints of the user.

HTE 3: Ecoshroom – Rhizome Sensor Box

The Ecoshroom Rhizome Sensor Box was taken by the artist to exhibitions. The artist received additional funding from Stimuleringsfonds (NL) to further develop the set-up and it was on display from May 4th, 2025 – June 22nd at [Zone2Source](#) in Amsterdam and a contribution was made to the architectural magazine Volume. Part of the prototype was the Ecoshroom-AI tool, which during the HTE was still in an early stage, but is now further developed and tested. The Ecoshroom-AI delves into the in-soil symbioses with mycorrhizal fungi. This prototype explores the fascinating world of fungal decision-making and its potential impact on future crop resilience and growth. The artist presented a keynote about Ecoshroom in November 2025 at Malta for Culture and shared insights on multispecies AI training—how plants, fungi, humans and AI can co-learn to shape future urban environments. It was also included in the panel on “AI and Creativity: Between Innovation and Ethics”.



Figure 3: Artist Ivan Henriquez at the installation of EcoShroom v.01. image credit: zone2source

The development plan for the Rhizome Sensor Box that came out of Ecoshroom had three actions:

1. development of the interface components
2. scientific research replication study with Mendel U
3. mycorrhizal inoculation exploration for agricultural SMEs

Related to [1], efforts were made to link the box to the Staramaki experiment. Unfortunately, the artist requested the experimental Rhizome Sensor Box setups for exhibition shortly after the experiments at Mendel University ended. The originally proposed HTE installation – specifically the Rhizome Box, designed as a set of plexiglass chambers equipped with sensors to monitor wheat growth in a controlled environment – will not be implemented by Staramaki. After discussions with the artist behind the Rhizome Box, it was confirmed that subcontracting for the installation or deployment of the HTE prototype is not feasible. It was therefore not possible to continue in the established manner. Despite this, the concept of the HTE installation has inspired an alternative line of experimentation. Mendel University has initiated a parallel study to monitor the growth of wheat under controlled conditions. Mendel University constructed an alternative growing setup and planted three varieties of seeds provided by Staramaki.

The collaboration also includes a targeted nitrogen application experiment, where nitrogen units will be introduced at specific growth stages in order to observe its influence on stem development. These observations are particularly valuable for Staramaki, as the quality and structure of wheat stems are central to their raw material sourcing and product development.

Related to [2], Mendel University performed a few experiments using the mycorrhizal fungi on peas without the use of the Rhizome Sensor Box. The results obtained were not conclusive and without scientific novelty.

Related to [3] the organic farm Terre di Zoé got acquainted through this HTE with the potential of adding mycorrhizal inoculation into their farming practice. However, the testing box was not suitable, since they want to test it in the open field. For this, they subcontracted an agronomist to support their testing on if the mycorrhizal inoculation will lead to more nutrients in the soil, with consequently better plants and better fruit. To have meaningful insight on this, we need to await the results of next seasons.

HTE 4: Council of Foods – Policymaker Learning Platform

The Council of Foods was developed by the collective Nonhuman Nonsense. The collective actively further developed both the council as the underlying reasoning to also implement it for other policy and nature related situations. In total we had identified four actions for the further validation and scale up of the project:

1. a pilot program to test the platform as a policymaker learning tool
2. cooperate with agricultural SMEs to expand the knowledge base
3. a pilot program to test the platform as a form of informative entertainment for public education
4. scientific research case study for LLM memory issues with KU Leuven

Related to [1], several actions have been undertaken. The Council of Food was discussed with some policy advisors after a presentation at the Sustainable Food System Innovation Forum Digital meet-up in May 2024. The collective was also invited to present the Council of Foods at the [Asilomar Conference about Biotechnology](#) in the

USA! They run a recurring council of foods meeting during the Conference, in parallel of the councils during the conference.

It was also included as part of the prototype park testing at Green Tech. See D5.8 (also submitted in Dec 2025) for more info.

Additionally, it was presented as a featured contribution at the Geek4Food conference on November 28th, 2025, as part of their dialogue on “Education and AI for skills-based transitions in Europe’s food systems”, where it contributed to the discussion on what educators teach, what policymakers prioritise, and what the food system needs. Some reflections from it:

“We measure skills in “smallest units of knowledge” whilst economic transitions happen in real-time across farmers, processors, retailers, education institutions, member states, EU coordination. The gap isn’t just pace—it’s paradigms” (Donella Meadows, 1999).

Educators, policymakers, stakeholders, and farmers prioritise different competencies because they operate within different constraints and timeframes. – [Geek4Food](#)” This is exactly also where the Council of Food was positioned.

Lastly, a scientific article has been written by Lija Groenewoud van Vliet and Jeffrey David Turk with the title “A feast of knowledge: How AI-powered food councils can transform policymaking in the digital era: . It got accepted to the International Journal of Innovation Studies and was published in November 2025, ISSN 2096-2487, <https://doi.org/10.1016/j.ijis.2025.11.004>.

Related to [2] the Council of Food got embraced by two of the SMEs, namely Logiqs and BeeSage. With this, the council was enriched with two additional topics, namely:

1) Pollination: Exploring the ecological, agricultural, and socio-economic importance of pollination. Addressing the threats posed by habitat loss, industrial agriculture, pesticides, and climate change and exploring how to protect pollinators.

For this also the character of Honey was added as a character with the following profile:

Born from the labor of thousands of worker bees Honey carries the collective memory of pollination, the flow of nectar, and the resilience of ecosystem under stress. It reflects both abundance and scarcity, bearing traces of poisoned fields, fragmented habitats, and shifting blooms. Honey speaks with clarity and urgency, exposing industrial overreach, demonizing systemic change, and insisting that survival depends on pollinators. It is the foundation made tangible: evidence, warning and call to action, reminding all that when the pollinator stops, the world stops.

2) Rethinking food production: a discussion on how different food production models impact nutrition, ecology and access- exploring ways to build systems that prioritize sustainability, flavor, and fairness without relying on nostalgia or hype).

For this also the character of Kale was also added as a character with the following profile: *a sharp-minded futurist from the Netherlands – nutrient-rich, data-driven, and*

proudly grown in a vertical farm. Rejecting nostalgia and corporate-driven food systems, Kale believes flavour, nutrition, and circularity thrive in climate-controlled environments. Friendly but firm, Kale believes the future of food is high-tech, circular and local – and isn't afraid to say so.

Related to [3] a stage was found during the Re_Nature festival in Amsterdam in September 2025. Re_Nature is a unique multidisciplinary festival with art and nature as its core. It combines substantive programs with magical performances and workshops.



Figure 4: Dialogue presentation by Filip Stanislavskis during Re_Nature 2025

The project also got further developed, built on the same architecture and applied to another context in: Council of Forrest. This time it was also accompanied with a movie: [Council of Forest on Vimeo](#) as a way to offer an additional layer of audience awareness and entry point for public education.

Related to [4] the questions surrounding LLM memory were researched within the biovia.icon D-STRESS study at KU Leuven. While standard LLMs often struggle to retain context over long durations, the D-STRESS project relies on 'digital phenotyping', tracking patterns of stress recovery over time using conversational agents. This necessitates the development of robust memory architectures that allow the AI to retain, synthesize, and recall subjective user experiences across multiple sessions to deliver personalized interventions. The insights gained here regarding persistent memory and 'personalized' decision-making are vital for scaling applications like the Council of Foods, ensuring that the AI agents can maintain consistent, evolving policy debates rather than disjointed, single-turn responses.

HTE 5: WTFood – Food System Glitches APP

WTFood was a user tool that existed of various combined interpretation options and combining LLM, generative AI and computer vision. All aspects have been further developed after the prototype is released and the costs of running the platform exceeded the further development potential, especially since it was a platform to raise awareness and dialogue, but with no direct ownership or particular focal supporter.

For the development plan for the Food System Glitches APP, we had identified 3 various actions:

1. a pilot program with HEC stakeholder to test the system for usage
2. cooperate with agricultural SMEs to test the suitability for direct producer-consumer communication
3. explore collaboration opportunities with EU institutions and NGOs to improve consumer awareness of their glitch activities

Related to [1] and [2] a combined effort was made by linking the artist with the PPE SME Instagreen. They selected WTFood because they saw the potential to jointly develop a valuable tool by which they can use the power of AI to democratise marketing and sales efforts, especially for small, local producers. Large companies have high marketing budgets and dedicated teams to sell inferior products (food with negative impacts on the planet and people's health). Small-scale farmers who dedicate themselves to produce healthy food for their local communities in a sustainable way, often struggle to compete with these large companies. Therefore, they teamed up to develop an AI tool for responsible, small-scale and local farmers across Europe and beyond to explore their local networks and find potential clients, related businesses and relevant events and other initiatives in their city.

This resulted in the [Fair Advantage tool](#): an AI-powered tool that aims to democratize marketing and sales efforts for small, local food producers. The platform helps sustainable farmers and food entrepreneurs to:

- Discover potential local clients (restaurants, specialty grocers, CSAs, etc.)
- Connect with relevant local communities and related businesses
- Find local events and networking opportunities
- Access actionable leads with direct links and contact details

By focusing on local connections, Fair Advantage helps build resilient food ecosystems while supporting those committed to sustainable practices. This website is a beta version to validate and experiment on building a platform based on the WTFood technology, which generates local search results based on product images and location data. The tool incorporates verification loops to ensure results are real and relevant. Fair Advantage adapts this technology to create targeted search capabilities for agricultural producers seeking to expand their local business networks.

Related to [3] the artist decided to focus on the Fair Advantage and the most valuable elements within WTFood, and knowing the costs to keep the platform for WTFood running, no further progress or application has been achieved.

[HTE 6: Vegetable Vendetta – Vegetable Food Marketing](#)

Vegetable Vendetta was developed by artists Jeroen van der Most, who saw the result of the HTE as a prototype also for his artistic presentations, and kept on developing the aesthetics and functioning of the manifestation. And with success. The piece has been presented at various exhibitions worldwide, presented and many stages during his keynotes, covered in different magazines, o.a. in the [Horizon Magazine](#) (July 2025), and even featured on [EuroNews](#) in October 2025 during an interview at Doha's Innovation by Design Summit.



Figure 5: Vegetable Vendetta at PoCo in Tallinn– visited by the president of Estonia and Maldives. credit: Jeroen van der Most

The development plan for the Vegetable Food Marketing tool that came out of Vegetable Vendetta listed 3 actions:

1. development of the system to work with SME food marketers directly in serving them to create content
2. scientific research on integrating real product imagery with AI generated scenes with Brno University of Technology
3. pursue a public campaign for desirable vegetables with national food authorities.

Related to [1] the prototype was selected by the SME Axia to get informed on how such an approach would empower their marketing and positioning of the tomato.

They used it as a way to understand what AI content generation means and they can collaborate with AI to communicate with the world. As a part of the PPE experiment with Axia, we extended the Vegetable Vendetta experiment to explore how a company like Axia could collaborate with AI-generated content for their own marketing and communication ambitions. For this, we selected to work with the following AI tools available in May 2025:

- KlingAI (in combination with DeepSeek)
- Clipdrop
- Dall-E

- ChatGPT
- Midjourney

The results showed at least 5 viable strategies to collaborate productively with AI for visual marketing and communication goals within Axia:

- Materials with the Real Products
- Marketing Concepts Reappropriated
- Surreal Scenarios
- AI Influencer Marketing
- Hyper Realistic Product Placement

This was all being executed as part of experimental research. However, it is important to be compliant with the AI Act regulations, GDPR as well as the design rights regulations and this advice has been given to the SME if they wish to pursue with one of the strategies. The experiment was an endeavor to show them the (un) possibilities of using these tools and get informed on if such practice is beneficial for their marketing operations.

Related to [2] this line of research was explored in two successfully defended Bachelor theses at Faculty of Information Technology, Brno University of Technology, supervised by Pavel Smrz in the academic year 2024-2025. Specifically, they compared commercial text2video models and tools with (much smaller) open-weight models and tested to what extent real images can be naturally embedded in generated advertisement-like videos. The quality of results depends on the nature of the product – cars, notebooks, or mobile phones look very good to excellent in the generated scenes (except of specific visual cues in modern car/phone features), but the feeling from distinguishing tomato varieties in the generated video is different and even the best models do not provide consistent quality across shots. Another student will focus on the topic in the upcoming academic year, and will explore the cutting edge video generation models, such as Sora 2.

Related to [3] we already mentioned in the intro the exposure artist Jeroen van der Most is already achieving through his performances as keynote speaker and his exhibitions. Additionally, this work also inspired the thinking and creation with the co/lab, which was one of the prototype park manifestations of Hungry Ecocities. For more details, see D5.8.

On January 27th, 2026, Jeroen will provide a keynote during the official EU Promotion of Agricultural Products: Info Days 2026. This event is organised by the European Commission's Directorate-General for Agriculture and Rural Development (DG AGRI) and the European Research Executive Agency (REA), showing how this project funded under DG Connect also makes the connection to the DG AGRI (see Annex 1)

HTE 7: Acoustic Agriculture – Transducer Growth Box

The test set-up for the transducer plant hydroponic growth box from Helena Nikolone was built at the premises of Mendel University, enabling continued research and further development.

We had identified two actions for this project:

1. scientific research continuation with Mendel University
2. cooperate with agricultural SMEs to test the system for different plants, including seeds and seed sprouts.

Related to [1] the experiments using more scientific approach were carried out, and part of the results was incorporated into a Msc thesis of [Erika Szomolaiova](#). The thesis was successfully defended, but it was not made public in order to publish the results in scientific journal. Further analyses of the plant material are ongoing to prepare a scientific publication.

Related to [2] there was some initial interest in doing the sound testing with the sprouting for the PPE SME Sprout Dynamics, however, due to the stage and focus of the SME, having a proper test set-up was not feasible. In the meantime, Mendel University, explored a connection with the Czech IT firm Comimpex to further develop a suitable algorithm for stimulation of tomato plants.

HTE 8: Symposio – Dedicated Eating Space Lighting

Symposio was developed as an open-source project with the intent to make it publicly available. The artist already communicated at the end of the residency that he would not continue this line of work as part of his artistic practice and had no interest in further commercially developing such a device.

Therefore, the development plan for the dedicated eating space light design for focused on 3 actions to see what the potential could be without a driving owner:

1. scientific research through a master thesis on light-changing AI with KU Leuven
2. disseminate to spatial designers to raise awareness on the opportunities in designing dedicated eating spaces
3. cooperate with agricultural SMEs on the link between tasting and mindful eating and the tasting experience of food products

Related to [1] no student at KU Leuven was interested in the study.

Related to [2] after initial conversations with spatial designers in the studio's network, the results and impact of this specific device weren't convincing enough to foster great interest without needing to adjust a lot.

Related to [3] the SME Sensebit selected this prototype to test, due to the interest of light on the eating patterns and hence also the taste. They selected it aligns because it aligned with some of their research objectives, but decided to implement a specific adaptation: removing the feedback loop. This modification allows them to focus on investigating the interaction between the luminic environment and sensory perception, rather than its responsiveness to sound. Or this they created a new, own testing set-up.

On the physical side, the setup involved the installation of lamps and custom light bulbs designed to allow controlled manipulation of environmental lighting conditions. On the software side, modifications were made to the codebase to enable real-time control and calibration of lighting parameters during testing.

The test plan has also been fully developed. The objective is to explore how changes in lighting conditions influence sensory perception—particularly in the context of digitally-augmented food experiences. The testing resulted in not enough evidence to pursue with this approach.

[HTE 9: Symbiosis.AI](#)

Unfortunately, the outcome of this experiment did not make it possible to define goals for further development or uptake. This is because the project never materialized as was foreseen. The research conducted for the experiment, as well as the experimental setup developed at Mendel University in Brno have been reused in various other Hungry EcoCities experiments related to plant health and growth factors.

3. Lessons Learned

The Humanizing Technology Experiments demonstrate that innovation is not a linear journey from prototype to commercialization. It showed the importance of validation, but also that actions might change and that some projects continue development, while others are more passive or even stopped. Following the Humanizing Technology Experiments after the residency enabled us to track how innovation functions in practice, particularly when art-driven methodologies intersect with food system challenges. These lessons emerged from what actually happened to 23 distinct development plans over eighteen months after 'project' ended. Out of the 8 high-potential application directions, we tracked that 4 projects remain in active development, but with adjustments, 3 are in passive exploration, and 1 has stopped.

The inclusion of the HTEs as mandatory experiments within the Paths-to-Progress experiments proved to be a valuable validation stage. This infrastructure enabled smooth transitions between the residency phase and real-world testing. It gave the consortium the opportunity to directly discuss and assess with SMEs the value and potential of the developed digital prototypes for their own operations. Through these interactions, the project actively supported the uptake of digital technologies across the agri-food value chain by facilitating learning and safe experimentation within the residency framework. This created a unique environment where both artists and practitioners could explore emerging technologies without the pressure of immediate commercial requirements.

A critical insight that emerged throughout the development process concerns artist ownership and dedication. For all of these prototypes, the artists remain the intellectual property owners. As Hungry EcoCities, we could support the work and point to different opportunities for development, but ultimately any continued development needed to align with the ambitions and interests of the artists themselves. In certain cases, the artists were more interested in further developing the artistic outcome rather than pursuing application outcomes within the food domain. This is entirely legitimate—not every artist envisions their work as a commercial product. It is also fair to recognize that some artists did not want to develop their prototypes into start-ups. For these creators, the point of interest in the project was the development process itself. By offering their insights to the commons and making their work available as open source, they contributed meaningfully to the domain even without taking the prototypes further commercially. However, for continued development to occur, there must be clear ownership and commitment to an idea from the development team or organization pursuing it. In some cases, it remains unknown what further impact might be achieved, yet the GitHub repositories keep the work available and testable for others who may wish to build upon it or adapt it for their own contexts.

This diversity of outcomes, where some projects pursue active validation and real environment testing while others contribute to the knowledge commons, reflects a

innovation ecosystem that does not solely focus on scalable products. An unexpected spin-off emerged from the mentorship of several of the most AI-intensive projects. Stephan Petermann, one of the core mentors working with Vegetable Vendetta, WTFood, and MVPxFFF, synthesized learnings from working with and pivoting around various large language models to create "[The Ultimate Companion to the Venice Architecture Biennale](#)"—an AI guide that distills relevant, site-specific information based on user profiles and interests. This guide was subsequently featured in an article by The [Guardian](#), demonstrating how methodological learnings from art-driven experiments can generate unexpected value and influence far beyond the original projects. It shows how mentors themselves can become innovators, leveraging insights gained from supporting prototype development.

The AI-related experiments across the portfolio also served as rich reflection and learning cases for the broader work on digital literacy. Lija and Rodolfo Groenewoud van Vliet, who were involved in all of the projects both as art-driven innovation mentor and as technical coordinators for Hungry EcoCities, conducted in-depth discussions on the progress, directions, and limitations of different AI applications across the portfolio. These observations informed their work developing a taxonomy of six distinct "AI-species" and resulted in different conceptual models for understanding how AI functions in various contexts.

Several of the AI-driven HTE experiments are now featured as short application examples illustrating different AI-species in the book "Samenleven met AI" (Co-existing with AI), which was released in general bookstores in November 2025. The book is aimed at both general and industry audiences, helping them develop informed understanding and confidence regarding emerging digital technologies. This demonstrates how the prototyping work generates insights that can scale far beyond any single innovation, contributing to broader technological literacy in society.



Figure 6: Samenleven met AI, 2025. Including Hungry EcoCities cases Vegetable Vendetta, Acoustic Agriculture, Ecoshroom and Council of Foods.

A notable success story involves the Council of Foods, which made the strategic decision to develop both the artistic outcome and the application outcome in parallel, and actively collaborated with two of the SMEs in the Paths-to-Progress experiments. By using the same architectural backbone for creating the Council of Forest, the team was able to leverage the knowledge developed during the first iteration and subsequently extend it to other relevant sectors. This expansion demonstrates that successful prototypes can serve as templates for broader application and influence. As a result, the Council of Foods has become an example for how to address complex systemic challenges through participatory, AI-informed approaches.

The overall picture that emerges is one where the application takes multiple forms. Some prototypes advance toward real-world validation and reach TRL6 or even 7. Others establish themselves as valuable resources in the knowledge commons. Still others catalyse broader shifts in how practitioners engage with technology and systems thinking. What unites these different trajectories is that they all emerged from rigorous, supported experimentation with artists and technologists working in genuine partnership with domain experts. The Humanizing Technology Experiments as a methodology proved capable of generating value across this full spectrum of outcomes.

Annex 1

Proof of upcoming event Promotion of Agricultural Products: Info Days 2026 with Vegetable Vendetta on the program.

source: [Promotion of Agricultural Products: Info Days 2026 - European Research Executive Agency](#)



Programme

DAY 1 – Tuesday, 27 January 2026

13:30 – 14:30	Welcome coffee and registration of participants
14:30 – 14:45	Official welcome <i>Christophe Hansen, European Commissioner for Agriculture and Food, European Commission</i>
14:45 – 16:00	Session 1 Promotion policy: a tool for competitiveness and resilience of the EU agri-food sector Introduction to the 2026 Info Days Presentation of the 2026 Annual Work Programme Q&A session Policy session: promotion as a tool for competitiveness and growth Q&A session
16:00 – 16:20	Virtual and on-site coffee break
16:20 – 17:45	Session 2 Get inspired: new horizons for EU agri-food promotion Keynote insight: Empowering EU agri-food promotion with AI – exploring 'Vegetable Vendetta' with Jeroen van der Most Cultivating change: the role of EU agri-food promotion programmes – beneficiary insights Q&A session
17:45 – 19:00	Networking cocktail



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Hungry EcoCities aims to explore one of the most pressing challenges of our times: the need for a more healthy, sustainable, responsible, and affordable agri-food system for all enabled by AI. More info: starts.eu/hungryecocities